

Fibers & Textiles

Fibers		Poly(p-phenylene-2,6-benzobisoxazole)(PBO) Fiber : <u>ZYLON®</u> *** <u>TECHNICAL INFORMATION</u> <u>Dyneema®</u> : Ultra-high-strength Polyethylene Fiber Heat & Chemical resistant fiber: <u>PROCON®</u> Heat generating fiber: <u>eks®</u>
Yarns & Fabrics	Cross-linked Acrylate Fiber	<u>EKS®</u>
	Polyester filament Yarns	<u>SPECIALITY FILAMENT</u> *** <u>HEIM®</u> *** <u>ESTER MAGIC®</u>
	Polyester fabric	<u>ESTER®</u> <u>ROSALLY®</u> <u>EKSLIVE®</u>
	Nylon Fabric	<u>NFDC</u>
	Recycled polyester	<u>ECHORCLUB®</u>
	Composite fabrics	<u>SOCIO®</u>
	Promix	<u>CHINON®</u>
	Knit fabrics	<u>Spectar®</u> <u>Wintima®</u> <u>Feeji®</u>
	Fabrics for men's shirting	<u>Excellent Fabrics</u> ***For Dress Shirting ***For Thoub Cloth
Finishing, Blending		<u>TOYOBO'S HYGIENE REVOLUTION</u>
Series		<u>TOYOBO's SIENCE IN COMFORT</u>
Brand		<u>TOYOBO Textile Brand list</u>

siro

Fibers & Textiles

Fibers

Yarns & Fabrics

Finishing, Blending

Series

Brand

Functional & Biomedical Products

Biochemicals

Pharmaceutical Products

Chemical Filter Series

Resins

Engineering Plastics

Shock Absorbing Device

Materials for Printing

Industrial Products

Films

Films

Others

Simulation CG & Apparel

R & D

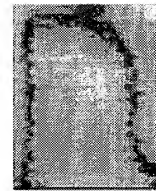
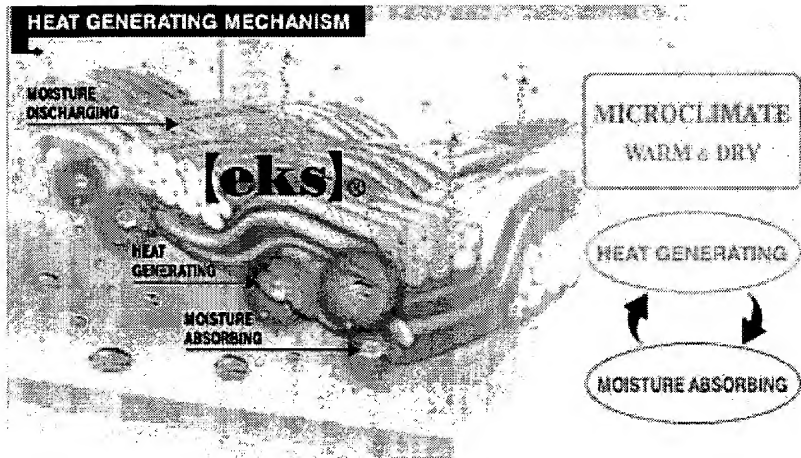
AT LAST...

A FIBER THAT GENERATES HEAT!

Existing fibers used for cold weather wear/gear simply insulate with its big bulk. They do not actually create heat to the body.

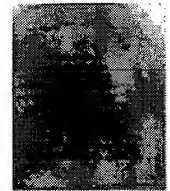
[eks]® is a perfectly NEW fiber based on a different design concept. [eks]® generates heat.

It absorbs water quickly and keeps you dry and comfortable.



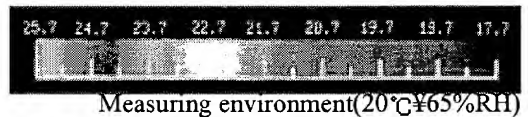
[eks]®

Thermography of a water saturated knit fabric that is made with 30% [eks]® fibers.



COTTON

Thermography of a water saturated knit fabric made from 100% cotton.



[eks] is a registered trademark of TOYOBO in Japan.

HEAT GENERATING FIBER

TOYOBO HOME PAGE

[eks]®

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Heat
GeneratingMoisture
Absorbing

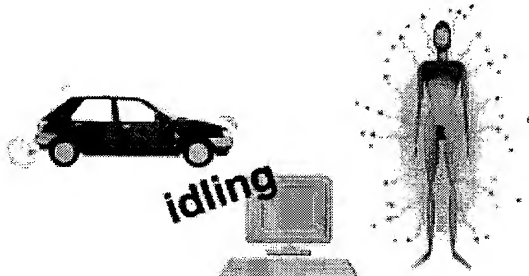
Deodorization

Temperature and
Humidity in Micro
Climate

Contact Us

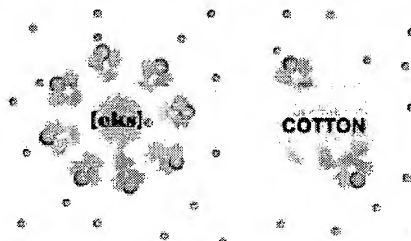
How does [eks]® generate HEAT?

Remember the last time you got an injection at the doctor's office; the cold feeling you experienced when the alcohol disinfectant was applied to your body. That cold feeling is a result of the heat evaporation phenomenon. When alcohol evaporates, it becomes moisture. The moisture takes the heat away from the skin. [eks]® adopts the opposite reaction to heat evaporation. This is called "ADSORP-TION HEAT". [eks]® absorbs perspiration and supplies heat to the body to help keep you comfortably warm.



[eks]® generates heat even when you are not perspiring. Even when a person is not exercising, his/her body will perspire. Automobiles and PC's do a similar thing, they idle so they are ready to work at anytime.

So, [eks]® will always give you heat.

[Concept of HEAT GENERATING SYSTEM]

Better than cotton, [eks]® has many more hands to catch the water (Hydrophilic group)

HEAT GENERATING FIBER

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[eks]®

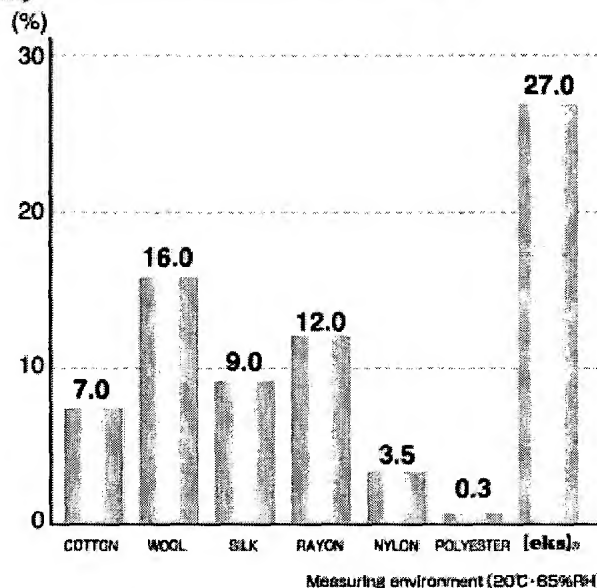
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MOISTURE ABSORPTION

[eks]® absorbs much more moisture than other fibers. It means that [eks]® generates much more heat, because heat generating ability is in proportion to moisture absorbing ability.

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